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10/748,525	12/29/2003	Tae-Woong Koo	043395-0377942	9348
86175 7590 05/26/2010 Pillsbury Winthrop Shaw Pittman LLP			EXAMINER	
(INTEL)			POHNERT, STEVEN C	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Attachment to Advisory

Continuation of box 3: The amendments of claims 1 and 24 filed on 5/7/2010 further limit the claims to, ""wherein each detectably distinguishable signal molecule encodes the base information for a position of the oligonucleotide and comprises at least one copy of a unique signal molecule" and "the intensity and type of detectably distinguishable signal molecules in the tag identifies the oligonucleotide." These new limitations further limit the scope of the claims and thus require further search and consideration because the claims now require additional elements.

Continuation of box 11:

The response traverses the 103 rejection based on Dower. The response reviews aspects of the MPEP and KSR with respect to obviousness type rejections. The response continues on page 9 by reviewing the teachings of Dower. The response continues by asserting that Dower does not teach oligonucleotides of having identical length of between 10 and 50 nucleotides or a reaction mixture with a target sequence. The response continues by reproducing the claim of the instant response which has not been entered. Thus these arguments are not persuasive.

The response incorrectly asserts, "As admitted in the Office Action, Dower does not teach the synthesis of oligonucleotide probes." This argument have been thoroughly reviewed but is not considered persuasive as the rejection states, "Dower teaches the instant method is drawn to a general stochastic method of synthesizing random oligomers." Thus contrary to the assertion of the response Dower teaches synthesis of oligonucleotides.

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The response continues by asserting that the instant claimed invention allows each unique signal molecule to be present up to 4 times. This argument has been thoroughly reviewed but is not considered persuasive as instant amendment has not been entered. Further the claims do not require the signal molecule is present 4 times, but is limited to being present a maximum of 4 times and thus does not differentiate it from the prior art of record.

The response asserts that the office action has failed to provide articulate reasoning for the obviousness reaction and asserts deficiencies in the teachings of Dower. The response has failed to clearly articulate the alleged deficiencies of Dower, except with a specific recitation of probes of the same length. However, the teachings of Dower clearly suggest probes of lengths 10-20 nucleotides thus rendering obvious probes between 10-50 nucleotides of the same length obvious.

The response again incorrectly asserts that Dower does not teach synthesis of the probes. This argument has been previously reviewed and is not persuasive for the reasons of record.

The response continues by asserting the examples of Dower do not motivate one of skill in the art to make the claimed population of oligonucleotides, however does not specifically identify which limitation is not obvious over the teachings of Dower.

The response continues by asserting one of skill in the art would not consider the hybridization of a target nucleic acid with its complementary probe, to be a receptor screening assay as taught by Dower. First, MPEP 716.01(c) makes clear that "The arguments of counsel cannot take the place of evidence in the record. In re

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Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). Examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration include statements regarding unexpected results, commercial success, solution of a long - felt need, inoperability of the prior art, invention before the date of the reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant." Here, the statements regarding one of skill in the art would not consider the hybridization of a target nucleic acid with its complementary probe, to be a receptor screening assay as taught by Dower.

This should not be construed as an invitation for providing evidence. As further stated in the MPEP 716.01 regarding the timely submission of evidence:

A) Timeliness.

Evidence traversing rejections must be timely or seasonably filed to be entered and entitled to consideration. In re Rothermel, 276 F.2d 393, 125 USPQ 328 (CCPA 1960). Affidavits and declarations submitted under 37 CFR 1.132 and other evidence traversing rejections are considered timely if submitted:

- (1) prior to a final rejection,
- (2) before appeal in an application not having a final rejection, or
- (3) after final rejection and submitted
- (i) with a first reply after final rejection for the purpose of overcoming a new ground of rejection or requirement made in the final rejection, or
 - (ii) with a satisfactory showing under 37 CFR 1.116(b) or 37 CFR 1.195, or

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(iii) under 37 CFR 1.129(a).

The response continues by asserting that Dower does not teach or suggest staochastic synthesis of random oligonucleotides with a sequence specific identifier tags and does not teach screening a population of random oligonucleotides having a sequence specific identifier tags for hybridization with a target nucleic acid. These arguments have been thoroughly reviewed but are not considered persuasive as, "Dower teaches the instant method is drawn to a general stochastic method of synthesizing random oligomers." Further the claims are drawn to a product and thus do not require screening, but the presence of a population of labeled probes and a target polynucleotide, which is obvious over the teachings of Dower.

The response then reiterates the assertions with respect to Dower stochastic synthesis steps and the use of a signal molecule up to 4 times. (It is noted that this appears to contradict previous assertions of the response that Dower does not teach synthesis of probes). This argument has been thoroughly reviewed but is not considered persuasive as claims limit the number of times a label can be present but do no require the label is present 4 times.

Thus in view of the response to arguments and the non-entry of the amendment the rejection is maintained.

The response provides no specific arguments to the 103 of Dower in view of Bawendi and Han other then to assert due to the deficiencies of Dower the rejection should be withdrawn. The arguments with respect to Dower have been addressed Art Unit: 1634

previously and are not persuasive for the reasons of record. The instant rejections are thus maintained.

Applicants remaining arguments refer to the amended claims and rely solely on the amendments. The applicant provided no further arguments not already considered. Since the arguments were not entered, the arguments are moot. Therefore the arguments drawn to the after final amendments have not been considered.

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven C. Pohnert whose telephone number is 571-272-3803. The examiner can normally be reached on Monday-Friday 7:00-:4:30, every second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Nguyen can be reached on 571-272-0731. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven C Pohnert/ Primary Examiner, Art Unit 1634